Intra-operative microscope for tumor margin assessment

Fact Sheet

Project Information

HistologTM Scanner

Grant agreement ID: 823284

Project website

DOI
10.3030/823284

Project closed

EC signature date
7 August 2018

Start date
1 September 2018

End date
31 August 2021

Funded under
INDUSTRIAL LEADERSHIP - Innovation In SMEs

Total cost
€ 3 310 125,00

EU contribution
€ 2 317 087,50

Coordinated by
SAMAN TREE MEDICAL SA
Switzerland

Objective

Breast Cancer is the most common cancer type and main cause of cancer related death in women worldwide. One in eight women in the EU and US will develop breast cancer in their lifetime. Breast-Conserving Surgery (BCS) also called lumpectomy is a standard of care for early breast cancer. Unlike mastectomy, in which the entire breast and lymph nodes are removed, lumpectomy involves only removal of the cancerous tissue and a margin of healthy tissue. Government initiatives to increase public awareness for early breast cancer detection are drastically increasing the number of patients eligible for BCS. Now, BCS is the most performed breast cancer surgery and accounts today for about 70% of all breast cancer surgeries. In

counterpart, BCS brings about a risk for the patient to need to undergo an additional surgery in case that not all the cancerous tissue is removed. Re-operation rates (RoR) in BCS are evaluated at 30% on average. Re-operation in BCS is costly for hospitals (€20.000 per re-operation), inconvenient for patients and delays initiation of adjuvant therapies. There is a clinical need for improved intra-operative margin assessment (IMA) methods to assess breast cancer tumor specimen margins in real time in the operating room to decrease RoR. HistologTM Digital Solution allows surgeons real-time, accurate, affordable, whole margin breast tumor assessment through the highest resolution at cellular and subcellular level by using a user-friendly graphical interface supported by a differentiating Automating Reading CAD tool without the need of a pathologist. HistologTM Digital Solution is fully compatible with the gold standard post-operational H&E assessment since it does not destroy specimen and can be integrated with patient information systems. SamanTree Medical's goal is to make of HistologTM Digital Solution the standard for IMA of breast cancer tumor margins, and decrease the RoR from the current 30% to less than 3%.

Fields of science (EuroSciVoc)

natural sciences > computer and information sciences > **software**

medical and health sciences > clinical medicine > surgery > **surgical specialties**

natural sciences > physical sciences > optics > **microscopy**

medical and health sciences > clinical medicine > oncology > **breast cancer**

natural sciences > computer and information sciences > artificial intelligence > machine learning > **deep learning**

Keywords

microscopy | histopathology | breast cancer | lumpectomy

Programme(s)

H2020-EU.2.3. - INDUSTRIAL LEADERSHIP - Innovation In SMEs MAIN PROGRAMME

H2020-EU.3. - PRIORITY 'Societal challenges

H2020-EU.2.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies

Topic(s)

EIC-SMEInst-2018-2020 - SME instrument

Call for proposal

H2020-EIC-SMEInst-2018-2020

See other projects for this call

Sub call

H2020-SMEInst-2018-2020-2

Funding Scheme

SME-2 - SME instrument phase 2

Coordinator

SAMAN TREE MEDICAL SA

Net EU contribution

€ 2 317 087,50

Total cost

€ 3 310 125,00

Address

AVENUE DE PROVENCE 12
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Switzerland

SME

Yes

Region

Schweiz/Suisse/Svizzera > Région lémanique > Vaud

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation

Last update: 20 July 2023

Permalink: https://cordis.europa.eu/project/id/823284